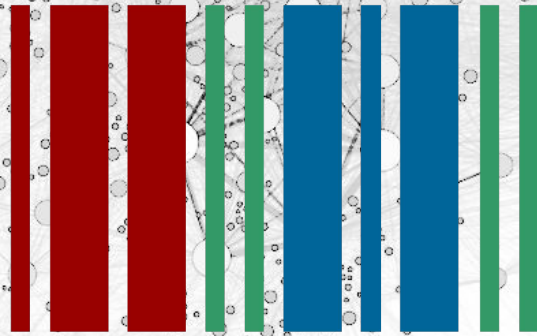


Wikidata: The free database for research and society



WIKIDATA






Schedule

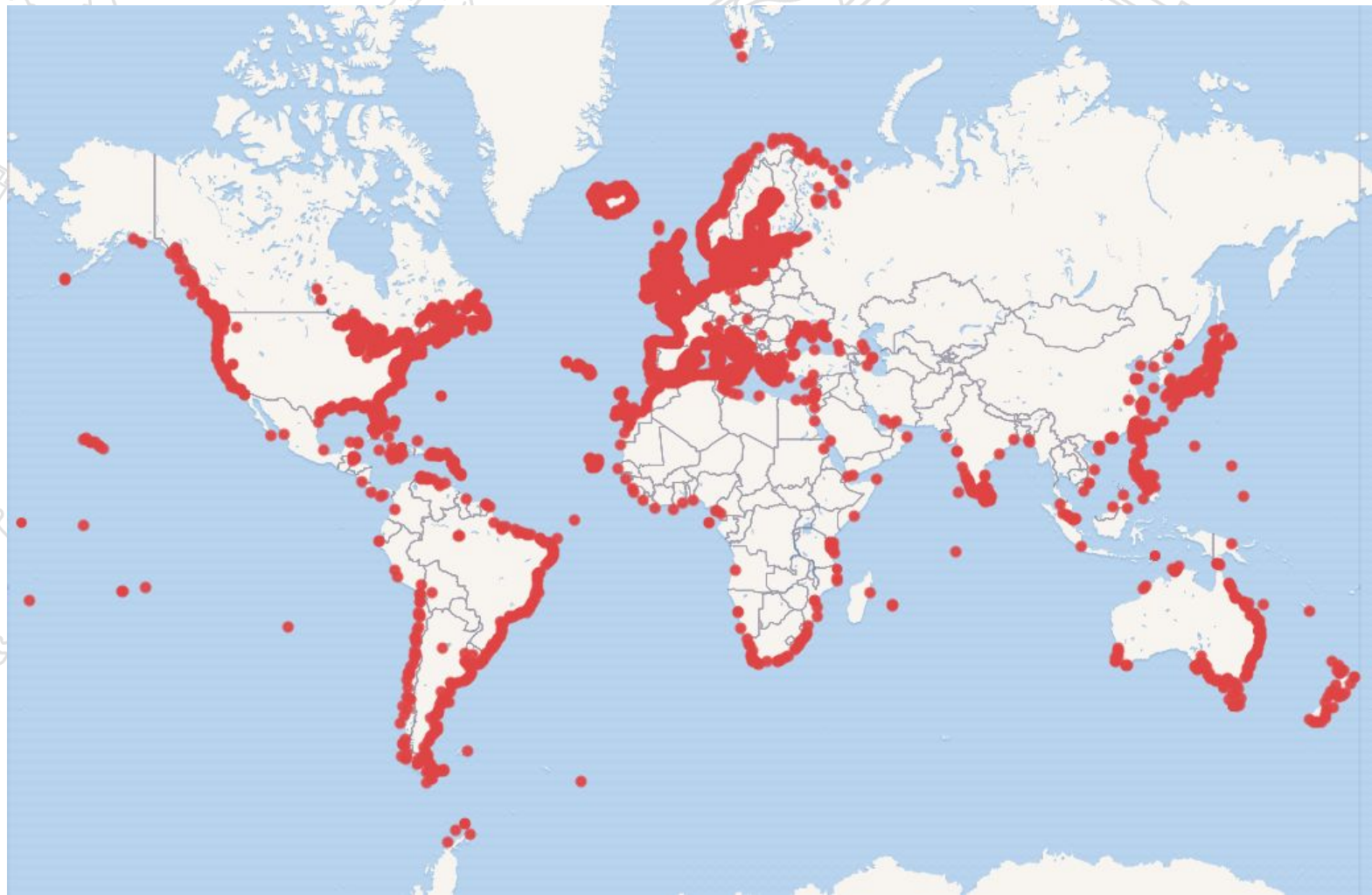
- Introduction ~45min talk
- Questions + Workshop

Warmup: Cool things Wikidata can do





All lighthouses in the world?



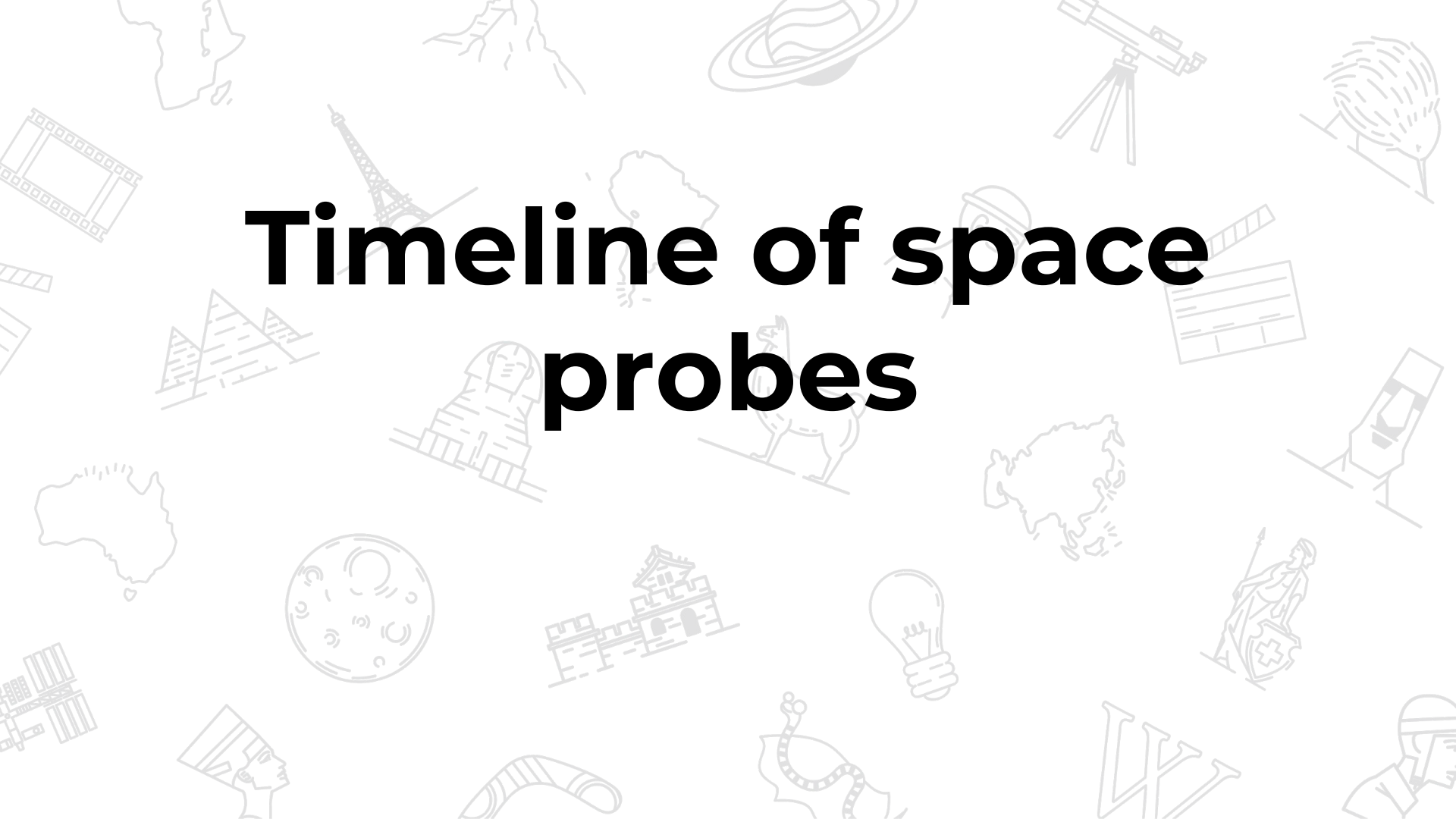
Subtypes of cake

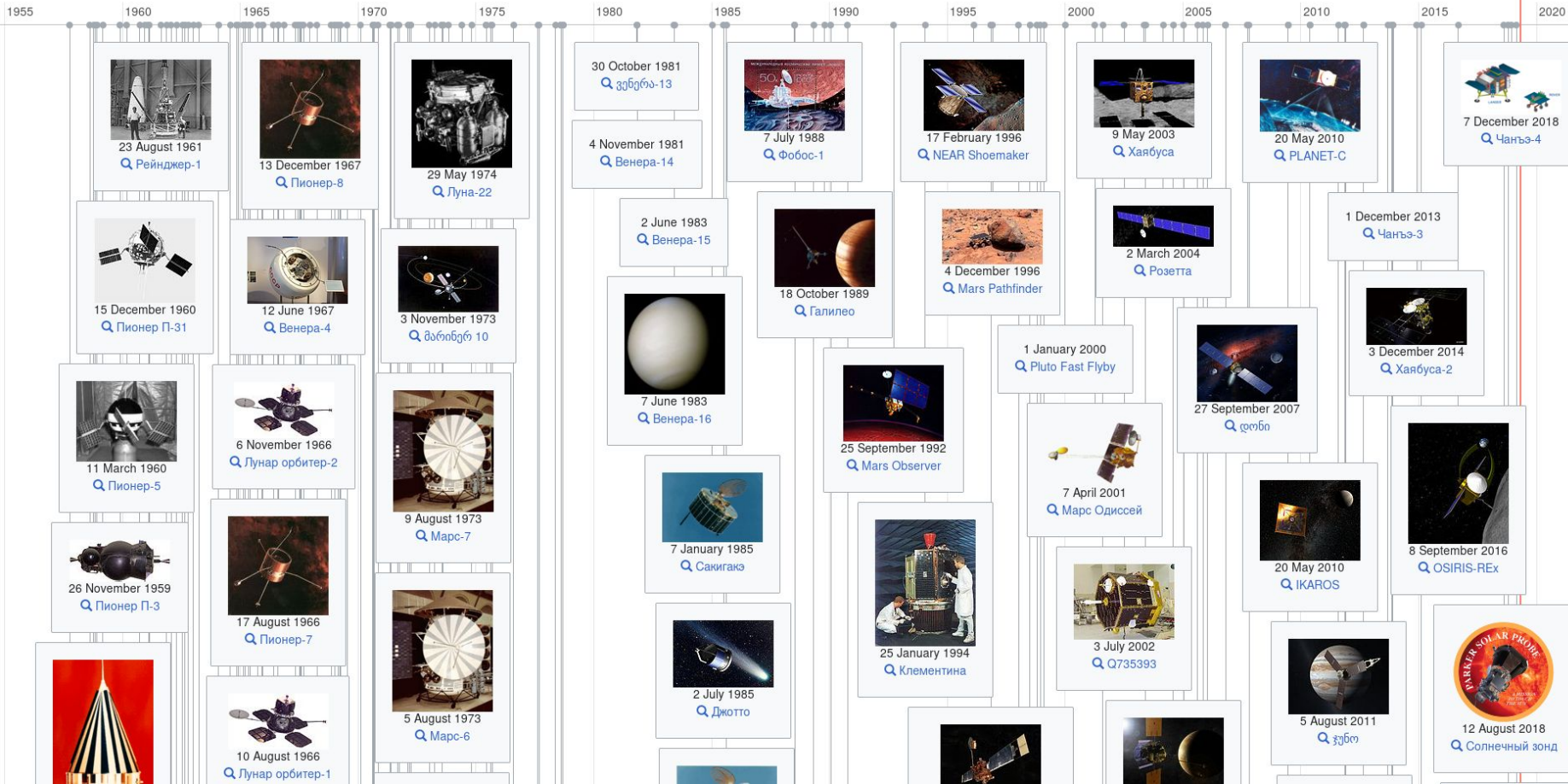




**What is the most
common depiction of
statues?**

Timeline of space probes



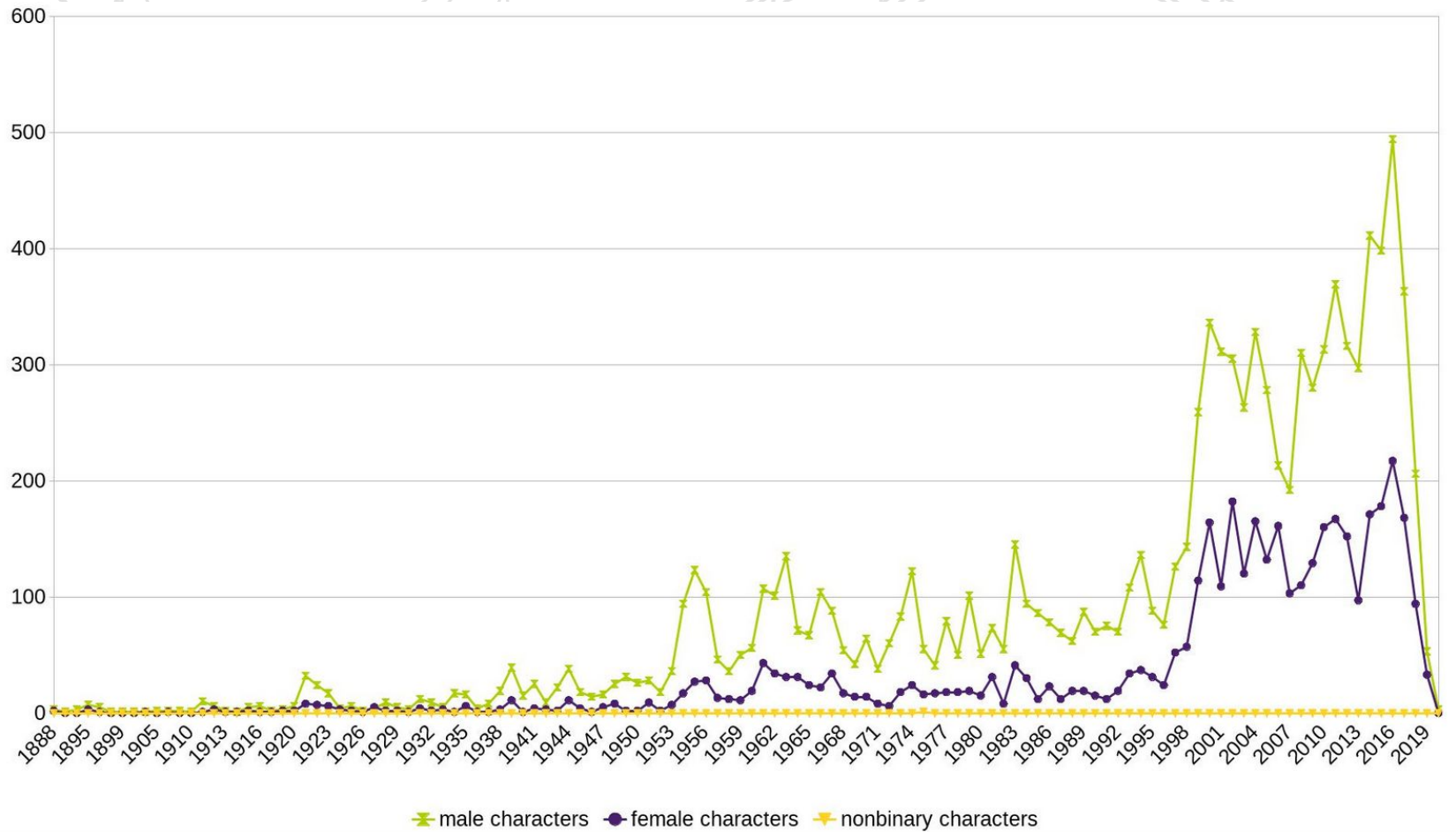




**Places that have
Rhine in their name?**

Gender of actors in movies as a function of time



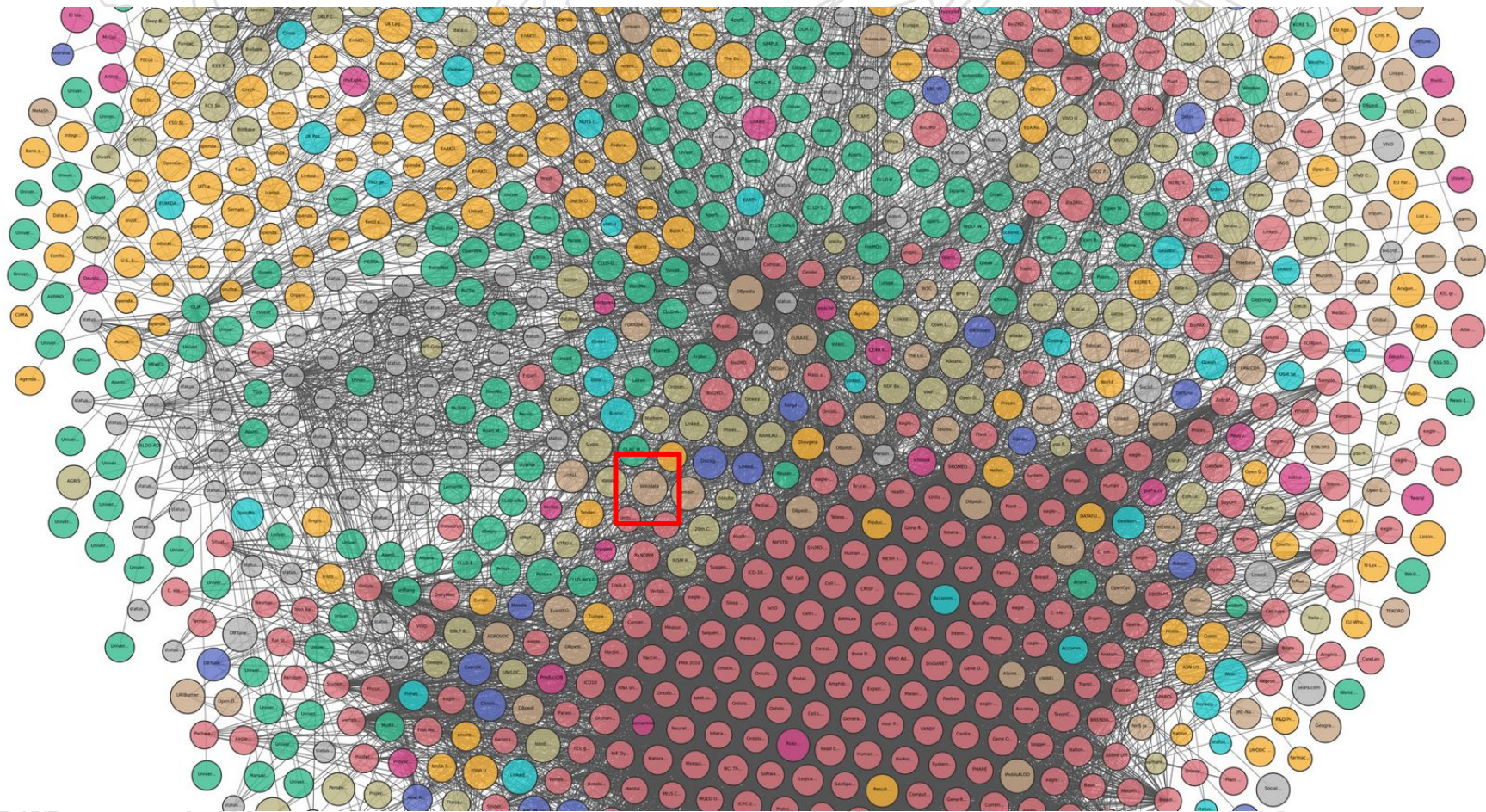


What is Wikidata?



Since 2001: Wikipedia is starting point into any topic

Since 2012: Wikidata is starting point into any data topic



<https://lod-cloud.net>

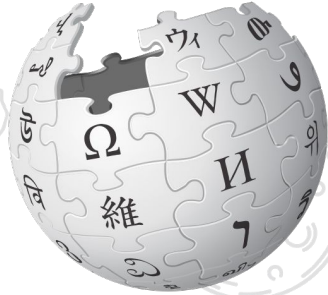
A community!



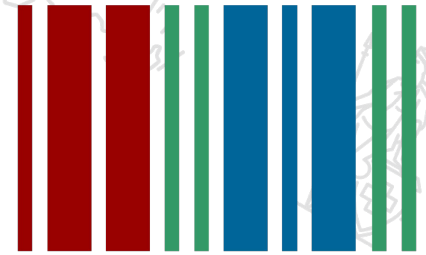
A Wikimedia project like Wikipedia



WIKIMEDIA
FOUNDATION

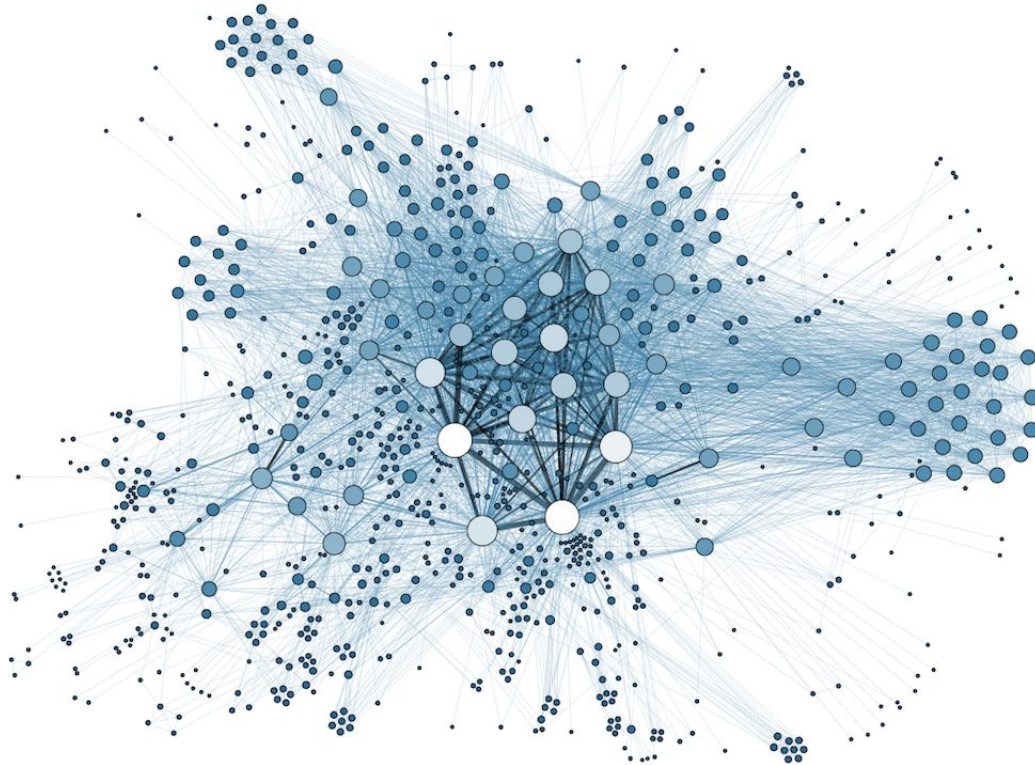


WIKIPEDIA
The Free Encyclopedia

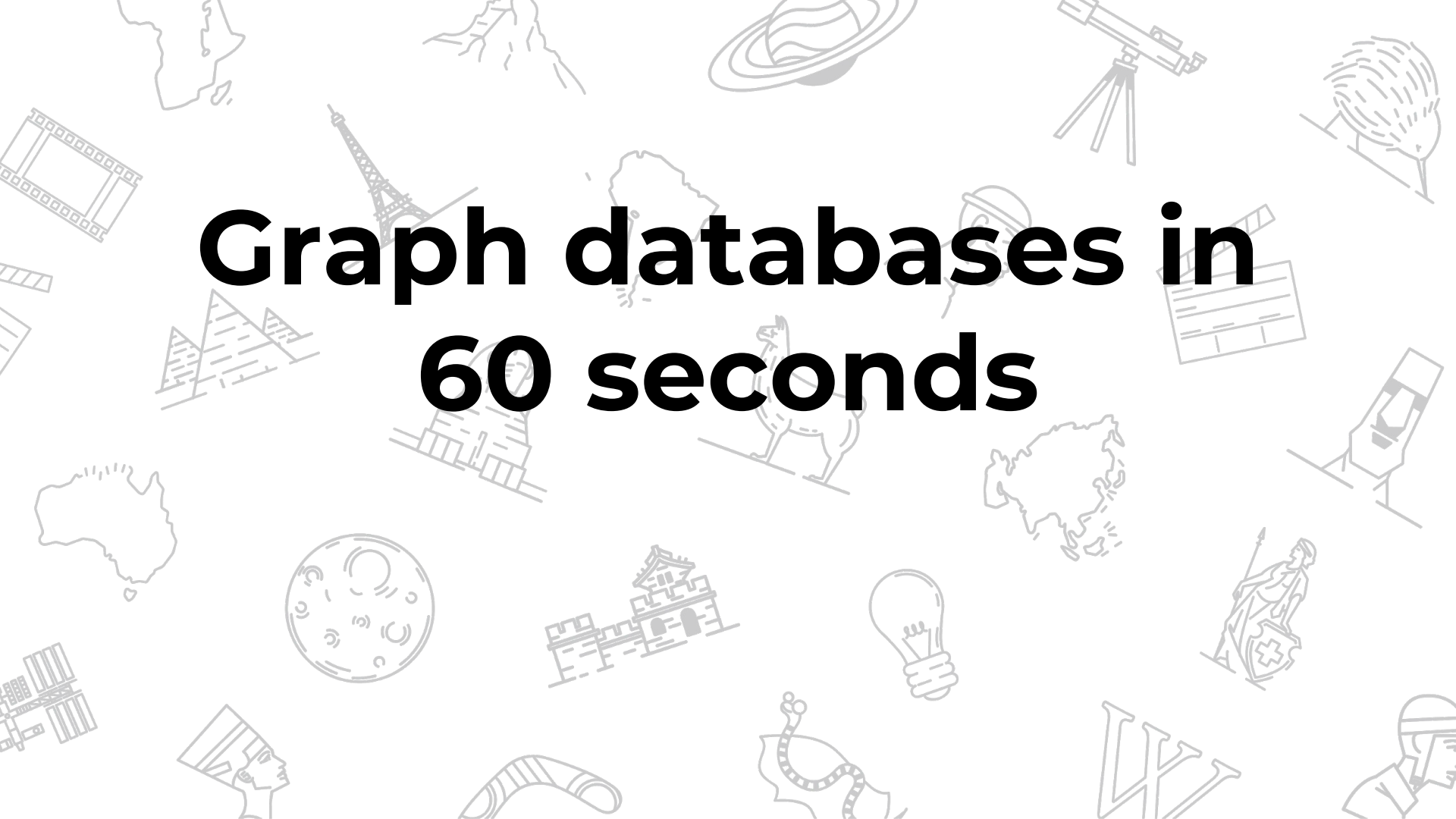


WIKIDATA

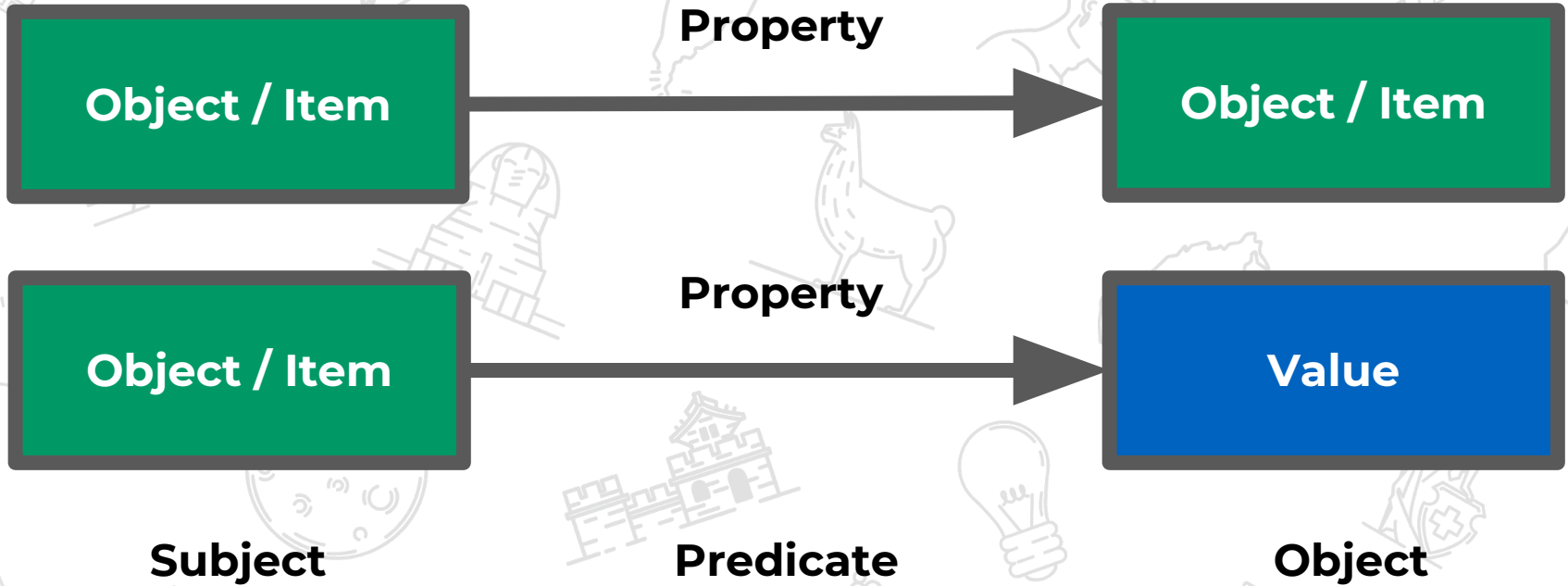
A graph database



Graph databases in 60 seconds



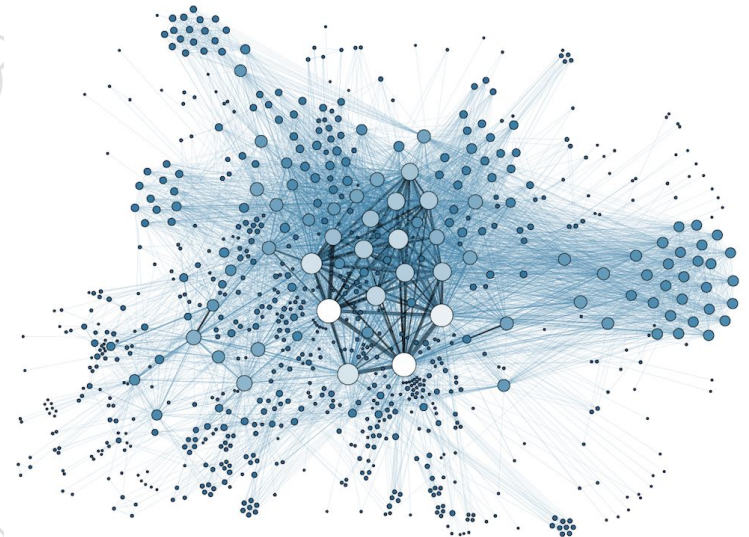
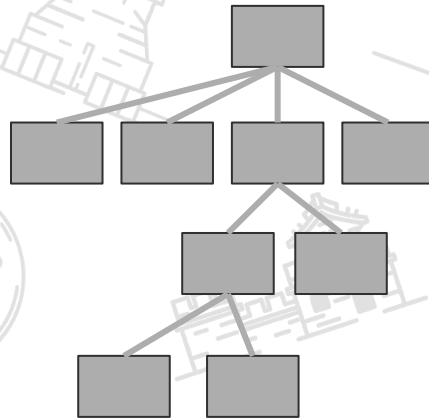
Tripels are used to link things




SQL-Database

Graph-Database

1	a	d	a
2	a	e	a
3	b	f	d
4	a	a	d





**But why did
Wikipedia need a
database?**

**For a computer
Wikipedia is a
long mostly
unstructured
text**

```
F K ↻ 🖼️ 📖 ✎ ▶ Erweitert ▶ Sonderzeichen ▶ Hilfe ✎
```

```
| AnzahlGrandSlamTitelDoppel =  
| AustralianOpenErgebnisDoppel = 1R (2006, 2007)  
| FrenchOpenErgebnisDoppel = 1R (2006)  
| WimbledonErgebnisDoppel = 2R (2006)  
| USOpenErgebnisDoppel = 1R (2006)  
| AnzahlGrandSlamTitelMixed =  
| AustralianOpenErgebnisMixed = AF (2006)  
| FrenchOpenErgebnisMixed =  
| WimbledonErgebnisMixed =  
| USOpenErgebnisMixed =  
| OlympischeMedaille1 = Bronze  
| OlympischeMedaille1Modus = Einzel  
| OlympischeMedaille1Jahr = 2008  
| Updated = 21. Mai 2018  
}}  
'''Novak Đoković''' ({{SrS|Новак Ђоковић}}, engl. Transkription  
'''Novak Djokovic''' {{Audio|Sr Novak Djokovic.ogg|anhören}}; * [[22.  
Mai]] [[1987]] in [[Belgrad]], damals [[Sozialistische Republik  
Serbien|SR Serbien]], [[Sozialistische Föderative Republik  
Jugoslawien|SFR Jugoslawien]]) ist ein [[Serbien|serbischer]]  
[[Tennis]]spieler.  
  
Đoković war 223 Wochen die Nummer 1 der  
[[Tennisweltrangliste|Weltrangliste]] und beendete vier Saisons  
(2011, 2012, 2014 und 2015) auf dieser Position. In seiner Karriere  
gewann er bislang 68 Titel im Einzel sowie ein Turnier im Doppel
```

Data was spread unevenly between language versions

Новак Ђоковић



Из Википедије, слободне енциклопедије

Новак Ђоковић

(Београд, 22. мај 1987) српски је професионални тенисер. На првом месту АТП листе је био укупно 223 недеље. Многи тениски критичари, бивши играчи и саиграчи сматрају Ђоковића једним од најбољих тенисера у историји.^[a]

Професионално игра од 2003. године. У досадашњој каријери освојио је тринаест титула на **гренд слем** турнирима: шест пута **Отворено првенство Аустралије**, четири пута **Вимблдон**, два пута **Отворено првенство САД** и

Новак Ђоковић



Новак Ђоковић на Међународном првенству у Италији 2014. године

Професионална каријера:

2003—

Надимак

Ноле, Цо

Држава

 Срби

Пребивалиште

Монте Ка

Датум рођења

22. мај 19

Место рођења

Београд  СФР

Novak Đoković

Novak Đoković [ˈnɔvaːk ˈd̩ɔːkɔvits̩] (krilic:

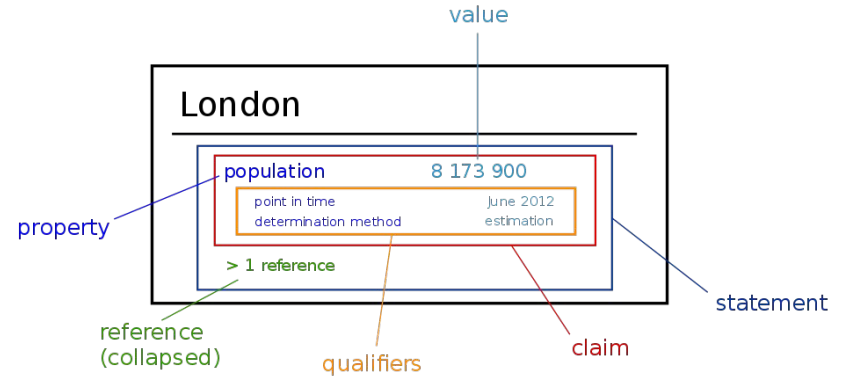


Novak Djoković

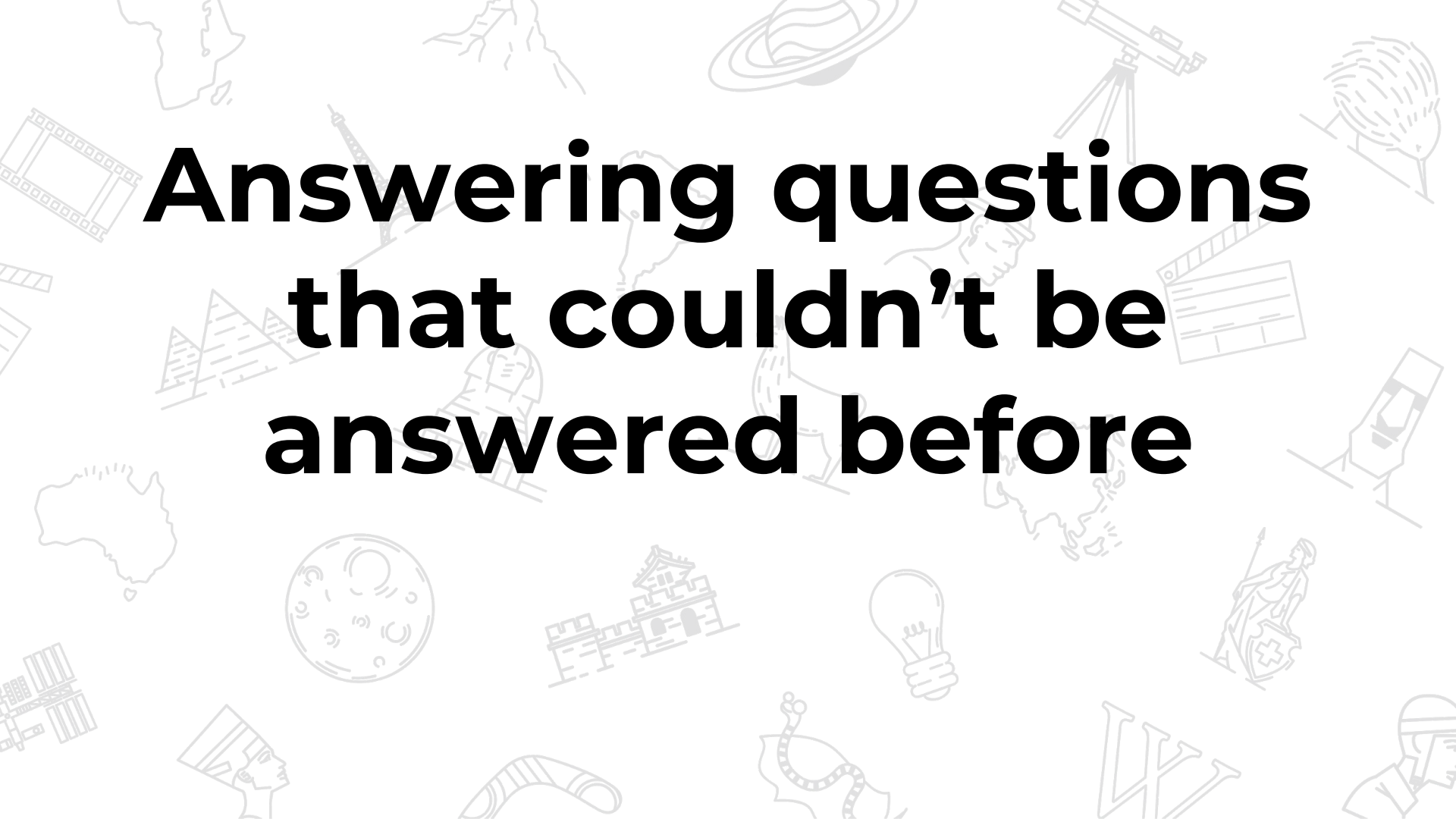
↻ Novak Ђоковић ^{? / i} (22^é gulané 1987, Belgrad) listikvané tenisé yé

Requirement to put data into context

- Multiple statements
- Conflicting statements
- Qualifiers
- Sources



**Answering questions
that couldn't be
answered before**





**Hasn't that been
done before?**

Wikipedia -> Graph-DB

 Freebase


DBpedia

Key differences of Wikidata:

- Data is stored, edited, managed, discussed in the same place (!)
- Data can be easily edited by people and bots
- More diversity than 1 company or organization



Main page
Community portal
Project chat
Create a new Item
Create a new Lexeme
Recent changes
Random item
Query Service
Nearby
Help
Donate

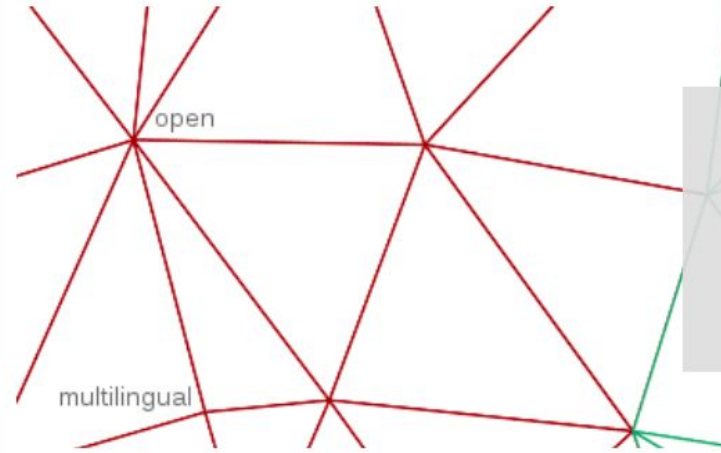
Print/export

Create a book
Download as PDF
Printable version

In other projects

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MediaWiki
Meta-Wiki
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Wikinews
Wikipedia
Wikiquote
Wikisource
Wikiversity
Wikivoyage
Wiktionary

Main Page Discussion



Welcome!

Wikidata is a free and open knowledge base that can be read and edited by anyone.

Wikidata acts as central storage for the **structured data** of its Wikimedia sister projects: Wikivoyage, Wiktionary, Wikisource, and others.

Wikidata also provides support to many other sites and services beyond Wikimedia.

Wikidata is available under a [free license](#), exported using standard [open data sets](#) on the linked data web.



Get involved

Learn about Wikidata

What is Wikidata? Read the [Wikidata introduction](#)

Naděžda Kavalírová (Q12040314)

Nadezda Kavalirova

Czech doctor, human rights activist and political prisoner

Naděžda Kavalírová was a [Czech Republic physician](#) and [human rights activist](#). She was born on [November 13, 1923](#) in [Opočno](#).

Her field of work included [Konfederace politických vězňů České republiky](#) and [Komunismus v Česku](#).

She died on [January 20, 2017](#) in [Pardubice](#).

Other properties

field of work	Konfederace politických vězňů České republiky Komunismus v Česku
birth name	Naděžda Morávková [cs]
award received	Order of Tomáš Garrigue Masaryk order point in time : 2006 [AL] Zelená perla ocenění point in time : 2011 [AL] Vyznamenání Zlaté lípy Vyznamenání Zlaté lípy ministra obrany České republiky point in time : 2008 [AL]
place of birth	Opočno <small>Gemeinde in Tschechien</small>
place of death	Pardubice <small>city in the Czech Republic</small>
date of birth	1923-11-13
date of death	2017-01-20
family name	Kavalírová <small>Czech family name</small>
given name	Naděžda <small>female given name</small>

Naděžda Kavalírová (Q12040314)

Nadezda Kavalirova

Czech doctor, human rights activist and political prisoner

femenino [médico](#) /[activista por los derechos humanos](#) de [República Checa](#)

Otras propiedades

campo de trabajo	Konfederace politických vězňů České republiky Komunismus v Česku
nombre de nacimiento	Naděžda Morávková [cs]
premio recibido	Orden de Tomáš Garrigue Masaryk order fecha : 2006 [AL] Zelená perla ocenění fecha : 2011 [AL] Vyznamenání Zlaté lípy Vyznamenání Zlaté lípy ministra obrany České republiky fecha : 2008 [AL]
lugar de nacimiento	Opočno <small>Gemeinde in Tschechien</small>
lugar de fallecimiento	Pardubice <small>capital de la Región de Pardubice de la República Checa</small>
fecha de nacimiento	1923-11-13
fecha de fallecimiento	2017-01-20
apellido	Kavalírová <small>Czech family name</small>
nombre de pila	Naděžda <small>female given name</small>

Naděžda Kavalírová (Q12040314)

Nadezda Kavalirova

Czech doctor, human rights activist and political prisoner

أثى طبيب/ ناشط حقوق الإنسان من التشيك

خصائص أخرى

[Konfederace politických vězňů České republiky](#) **مجال العمل**

[Komunismus v Česku](#)

Naděžda Morávková [cs] **الاسم عند الولادة**

[Order of Tomáš Garrigue Masaryk](#) order **الجوائز المستلمة**
نقطة في الزمن : 2006 [AL]

[Zelená perla](#) ocenění
نقطة في الزمن : 2011 [AL]

[Vyznamenání Zlaté lípy](#) Vyznamenání Zlaté lípy ministra obrany České republiky
نقطة في الزمن : 2008 [AL]

[Opочно](#) Gemeinde in Tschechien **مكان الولادة**

city in the Czech Republic **مكان الوفاة**
باردويتسه

1923-11-13 **تاريخ الميلاد**

2017-01-20 **تاريخ الوفاة**

[Kavalírová](#) Czech family name **الاسم العائلي**

[Naděžda](#) female given name **الاسم الأول**

Naděžda Kavalírová (Q12040314)

Nadezda Kavalirova

Czech doctor, human rights activist and political prisoner

женский пол врач /правозащитник из Чехия

Другие свойства

область деятельности [Konfederace politických vězňů České republiky](#)
[Komunismus v Česku](#)

имя при рождении [Naděžda Morávková](#) [cs]

полученные награды [орден Томаша Гаррига Масарика](#) высший орден Чехословакии и Чехии
момент времени : 2006 [AL]

[Zelená perla](#) ocenění
момент времени : 2011 [AL]

[Vyznamenání Zlaté lípy](#) Vyznamenání Zlaté lípy ministra obrany České republiky
момент времени : 2008 [AL]

место рождения [Opочно](#) Gemeinde in Tschechien

место смерти [Пардубице](#) город - Пардубице

дата рождения 1923-11-13

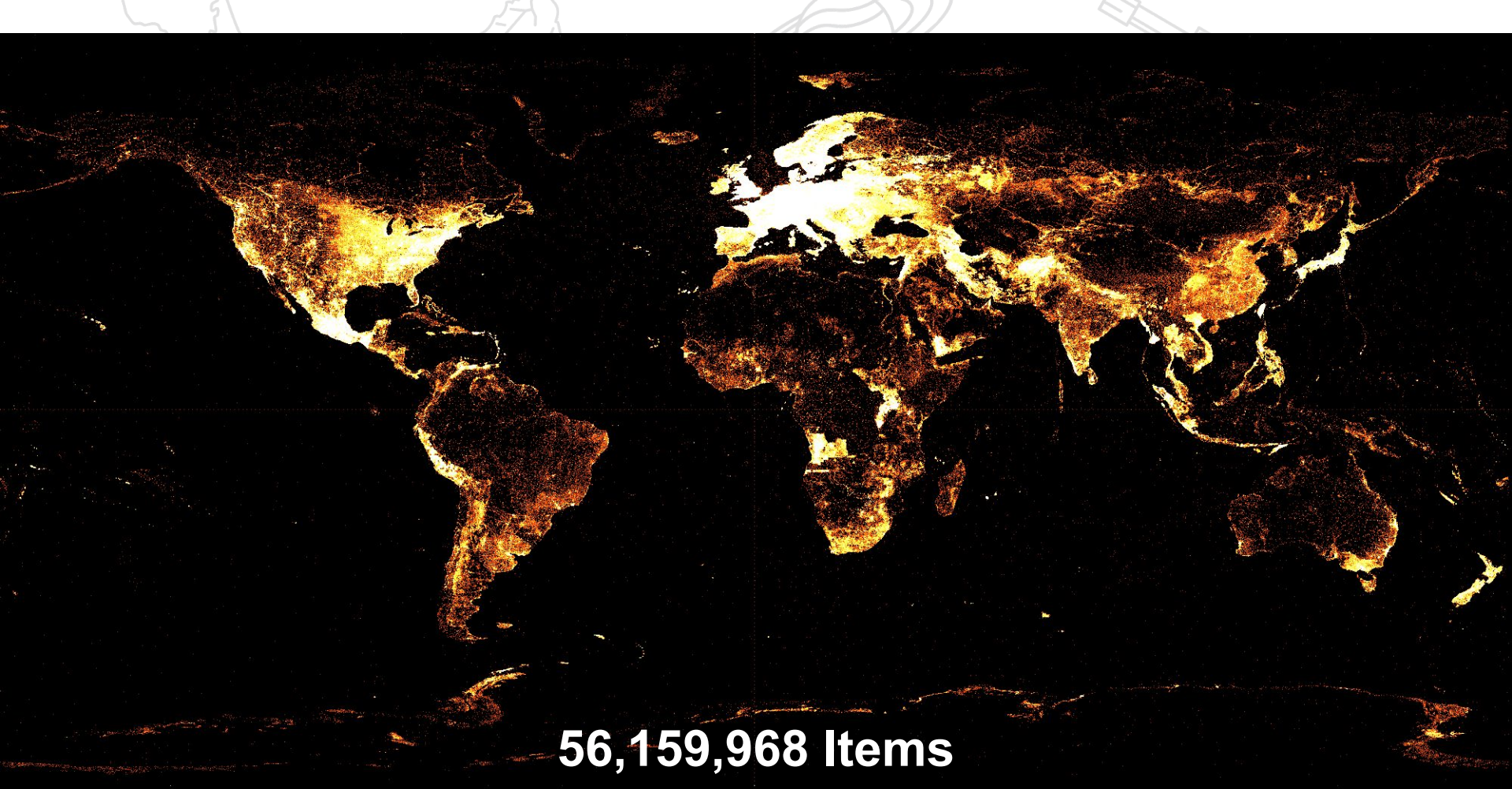
дата смерти 2017-01-20

фамилия [Kavalírová](#) Czech family name

личное имя [Naděžda](#) female given name

Let's look at some stats



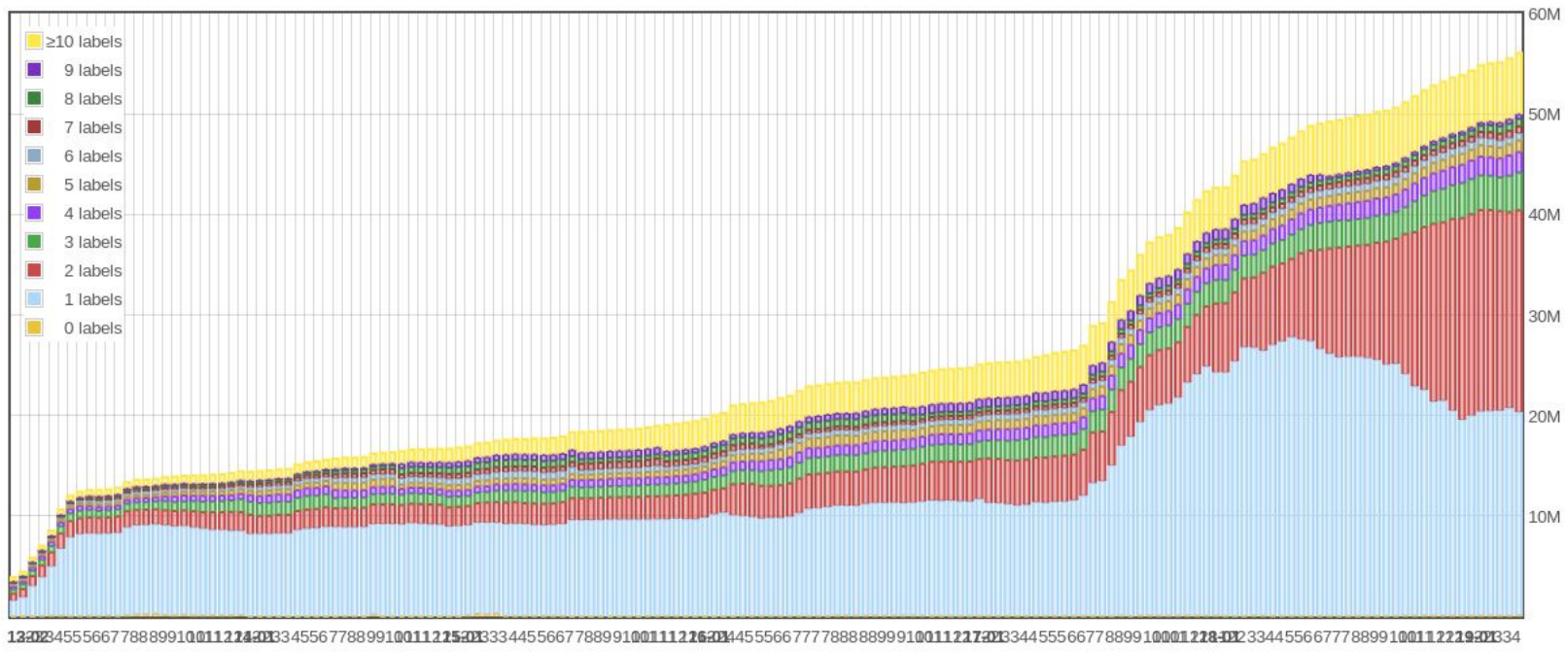


>700 Millionen Tripel



<https://grafana.wikimedia.org/dashboard/db/wikidata>

60 million labels in over >300 languages



<https://tools.wmflabs.org/wikidata-todo/stats.php>

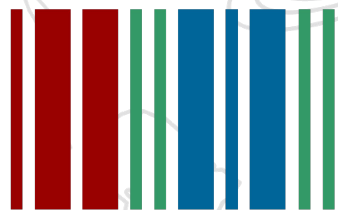


**Impossible in theory,
but works in practice**

<http://listen.hatnote.com/#wikidata>

Can I make my own Wikidata?





WIKIDATA



MEDIAWIKI



SPARQL-Basics



SELECT ?places ?people

WHERE

{

#Comment

?places **prefix:zip** [] .

?people **prefix:place_of_birth** **prefix:St.**

Gallen .

}

1) First blood

All movies that Sylvester Stallone wrote and acted in

2) More conditions

Actors, that were born in USA and acted in movies, set
in Afghanistan

SELECT ?film ?actor

WHERE

{

?film **wdt:P840** **wd:Q889** .

?film **wdt:P161** ?actor .

?actor **wdt:P19** ?place .

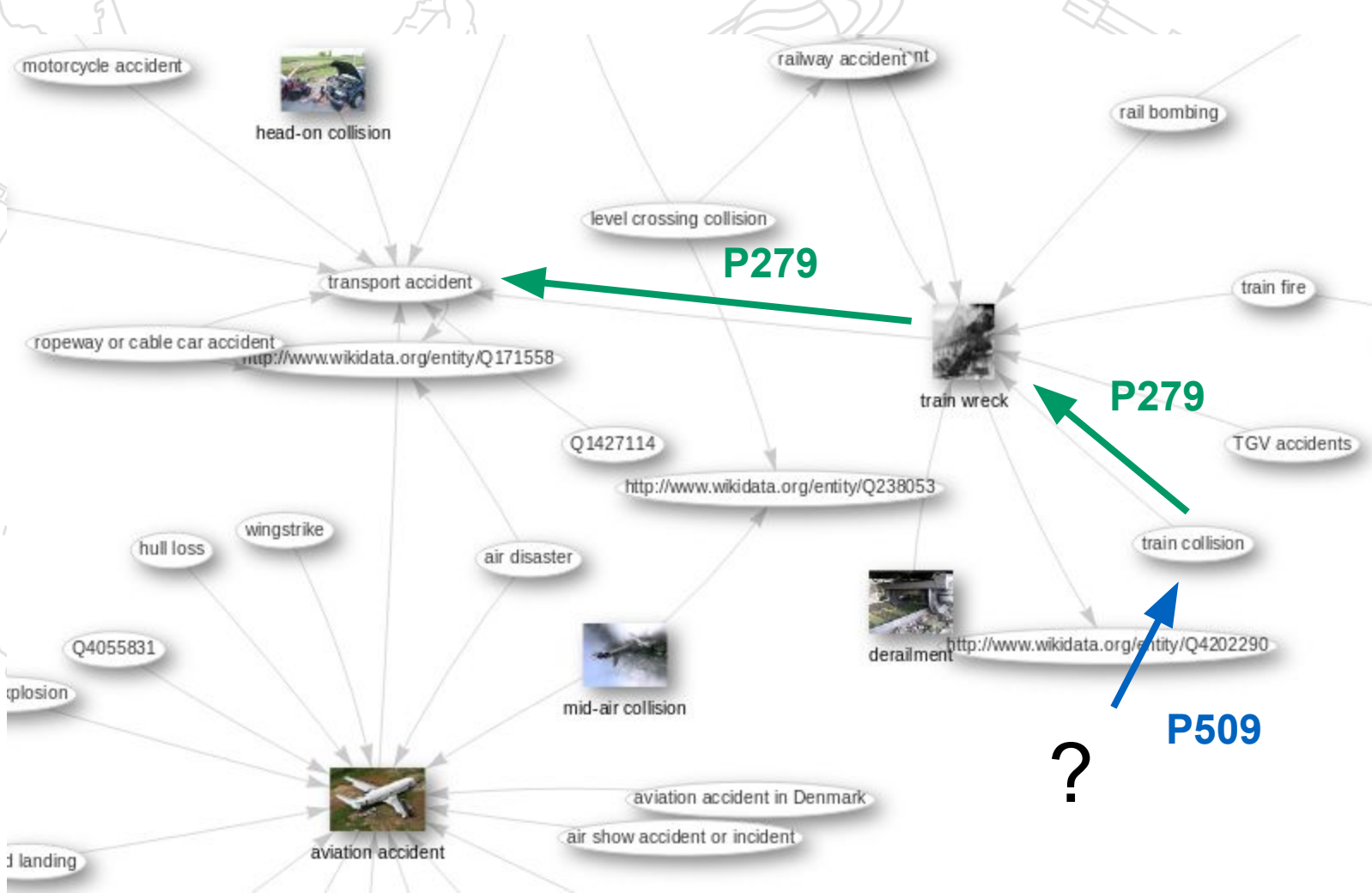
?place **wdt:P17** **wd:Q30** .

}

ORDER BY ?filmLabel

3) Queries with *

People, that were killed in transportation accidents without knowing the specific type of transportation





SELECT ?item

WHERE

{

?item wdt:P509/wdt:P279* wd:Q11822042.

}

Further reading



- https://www.wikidata.org/wiki/Wikidata:Request_a_query
- <https://angryloki.github.io/wikidata-graph-builder>
- https://www.wikidata.org/wiki/Wikidata:Data_access
- https://www.wikidata.org/wiki/Wikidata:SPARQL_tutorial
- https://www.wikidata.org/wiki/Wikidata:Property_proposal
-